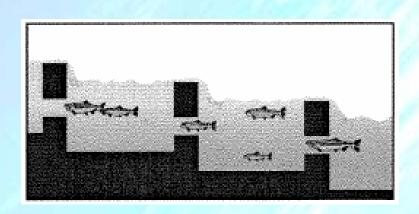
Application of Criterium Decision Plus and Other Related Experiences

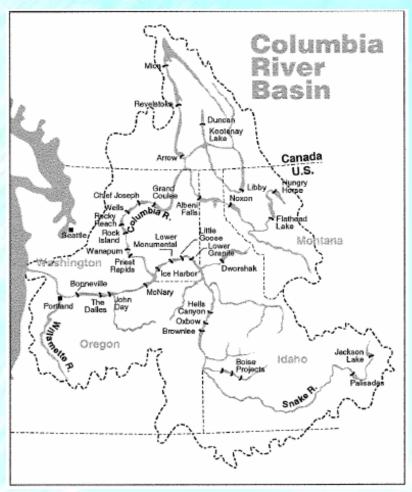
Bill Swanson and Christie Dowling MWH

May 24, 2004

The Columbia River fish passage study was sufficiently complex that it benefited from application of a multi-

criteria planning tool

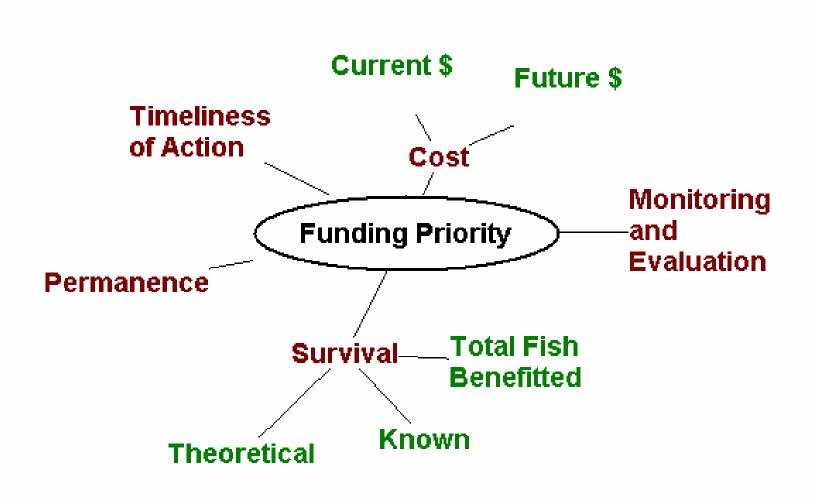




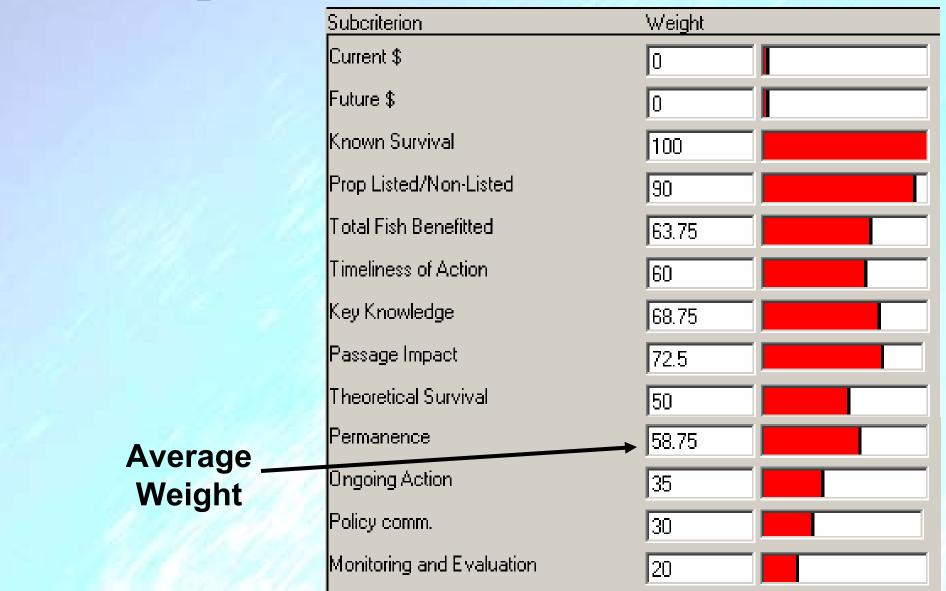
Criterium Decision Plus (CDP) is ideal for multiple criteria decisions with diverse stakeholders



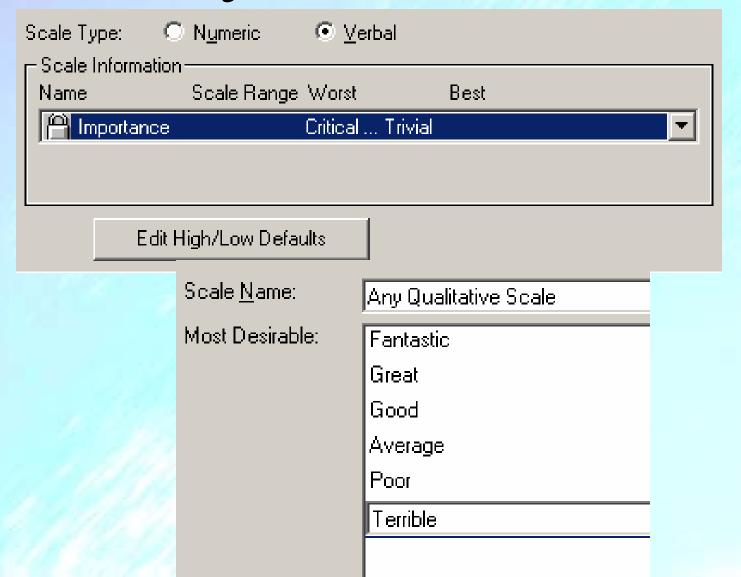
Brainstorming sessions are often a good way to obtain input from stakeholders



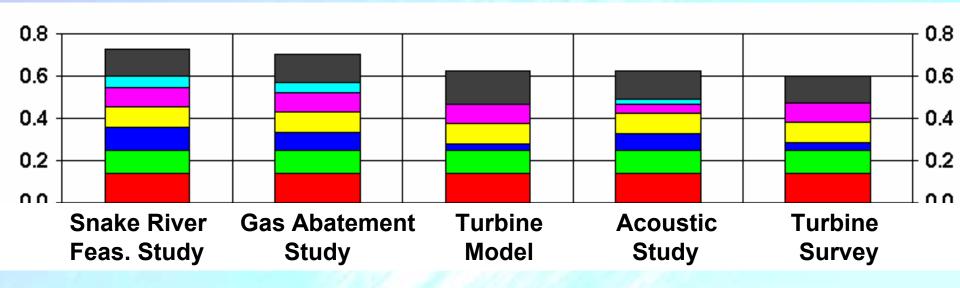
Criteria rating and tradeoffs illustrate relative priorities



Verbal rating scales allow evaluation of qualitative objectives



Identification of decision drivers allows focus on key issues

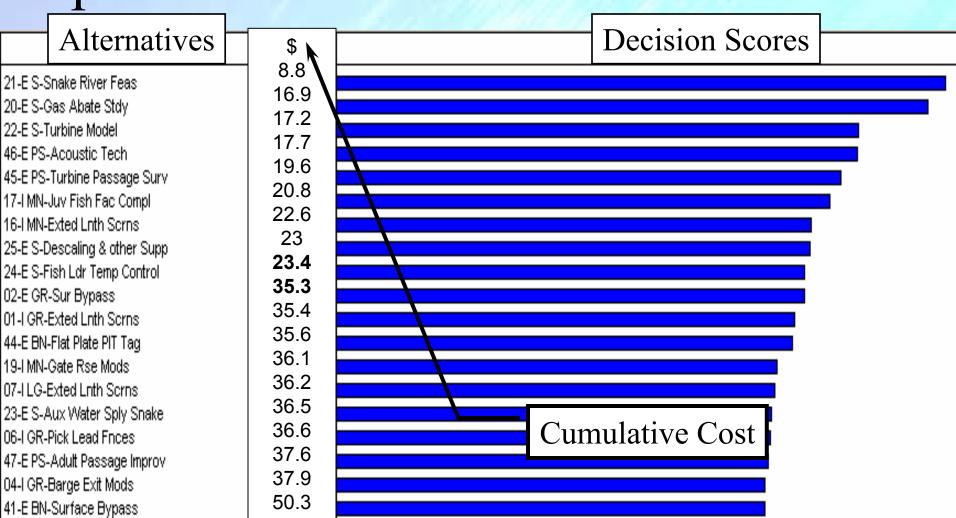




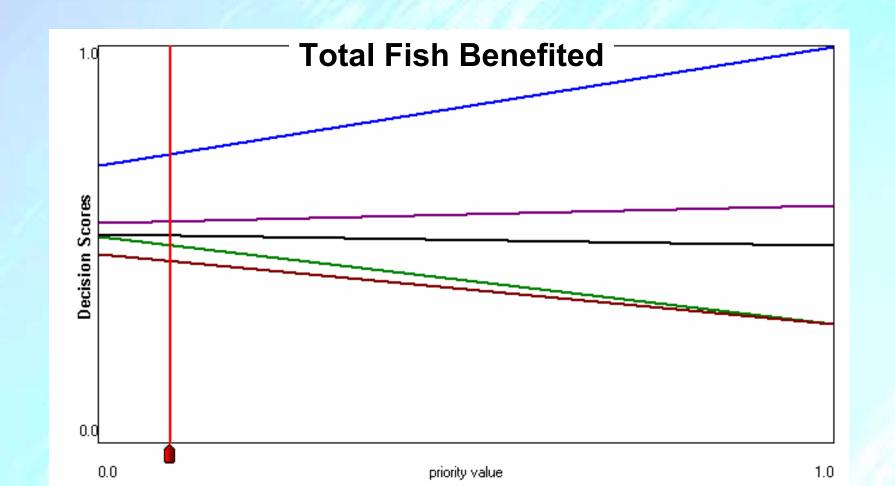
Uncertainty evaluation indicates which attributes may warrant further study

Criteria	Contrb	positive
Timeliness of Action	71%	
Theoretical Survival	19%	
Policy comm.	7%	
Monitoring and Evaluati	3%	
Current \$	0%	
Future \$	0%	
Known Survival	<u>0</u> %	

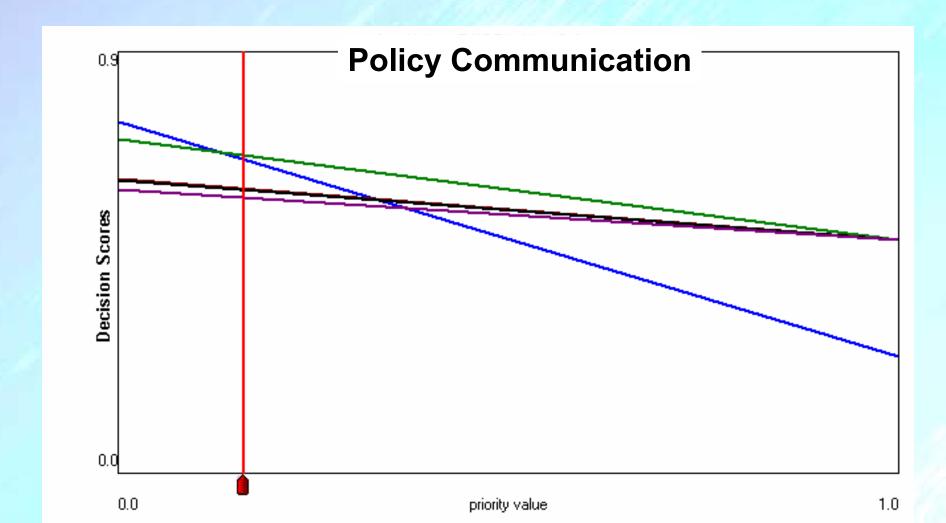
Cumulative score presentation facilitates understanding of financial implications



Sensitivity analysis reveals criteria that are **not** sensitive to changes in weighting



Sensitivity analysis reveals criteria that are sensitive to changes in weighting



Water resources planning can benefit from a multi-criteria decision support process

Decision Goal

Information Data Alternatives Priorities Values Policies Qualitative + Quantitative Evaluation Input from Focus on Key Stake-What-If Issues **Holders** Scenario Modeling **Prioritize** Consensus

Discussion